

**REMARKS**

Claims 1-24 were pending in the application. Claims 1-24 have been canceled and new claims 25-51 have been added.

Cancellation of and/or amendment to the claims should in no way be construed as an acquiescence to any of the Examiner's rejections. The cancellation of and/or amendments to the claims are being made solely to expedite prosecution of the above-identified application. Applicants reserve the option to further prosecute the same or similar claims in the instant or in another patent application.

No new matter has been added. Support for the amendments to the claims can be found in the specification as originally filed. For example, support for claims 25 and 26 can be found at least in claims 9, 12 and 15 as previously pending, with support for the term "antibiotic resistance" found in the specification at least at page 41, line 4. Support for claims 27, 37 and 48 can be found at least in claim 11 as previously pending. Support for claims 28, 38 and 49 can be found at least in claim 13 as previously pending. Support for claims 29, 39 and 50 can be found at least at page 1, lines 16-17 of the specification. Support for claims 30, 40 and 51 can be found in the specification at least at page 2, lines 6-10. Support for claims 31 and 41 can be found in the specification at least at page 23, lines 21-26. Support for claims 32 and 42 can be found in the specification at least at page 11, lines 21-25. Support for claims 33 and 43 can be found in the specification at least at page 5, lines 29-32. Support for claims 34 and 44 can be found in the specification at least in claims 9, 12 and 15 as previously pending and in the specification at page 8, lines 15-23. Support for claim 35 can be found at least in claim 15 as previously pending and in the specification at page 8, lines 15-23. Support for claim 36 can be found in claim 10 as previously pending, with support for the term "antibiotic resistance" found in the specification as listed *supra*. Support for claim 45 can be found in claims 1, 9, 12 and 15 as previously pending. Support for claim 46 can be found in the specification at least at page 21, lines 1-6. Support for claim 47 can be found in the specification at least at page 21, lines 6-7.

Rejection of Claims 1-24 Under 35 U.S.C. § 101

The Examiner has rejected pending claims 1-24 under 35 U.S.C. 101 as claiming the same invention as that claimed in U.S. Patent No. 6,346,391. Claims 1-24 have been canceled, thereby rendering the rejection moot with respect to those claims.

New claims 25-51 do not claim the same invention as that claimed in U.S. Patent No. 6,346,391. The claims as presently pending pertain to methods of screening for compounds which reduce *antibiotic* resistance in *microbes comprising at least two of the following traits: i) at least one chromosomal mutation in a gene encoding a antibiotic target that renders the microbe resistant to one or more antibiotics; ii) a second mutation (to the same gene or a different gene than in (i)) that further increases antibiotic resistance, and iii) increased expression of at least one efflux pump*. The claims further pertain to methods of treating infections caused by such microbes. Thus, the claims are different from those issued in U.S. Patent 6,346,391. Accordingly, Applicants respectfully request reconsideration and withdrawal of the rejection as it may be applied to claims 25-51 under 35 U.S.C. § 101.

Rejection of Claims 1-24 Under the Judicially Created Doctrine of Obviousness-type Double Patenting Over U.S. Patent 6,677,133

Claims 1-24 have been rejected as being obvious in view of claims 1-29 of U.S. Patents Nos. 6,677,133. Claims 1-24 have been canceled and new claims 25-51 have been added. If the Examiner insists on maintaining this rejection for new claims 25-51, Applicants will consider filing a terminal disclaimer.

Rejection of Claims 1-24 Under the Judicially Created Doctrine of Obviousness-type Double Patenting Over U.S. Patent 6,448,006

Claims 1-24 have also been rejected as being obvious in view of claims 1-22 of U.S. Patent 6,448,006. This rejection is respectfully traversed.

Claims 1-22 of the 6,448,006 patent pertain to methods of screening a test compound for the ability to ***induce a multiple antibiotic resistance*** (Mar) phenotype in a microbe. Induction of a Mar phenotype is assessed by ***monitoring the expression*** of a microbial gene locus (e.g., *marA*, *soxS*, *AcrAB*, etc.). Specific types of compounds screened for the ability to induce a Mar phenotype, as designated by the claims of the 6,448,006 patent, include non-antibiotic surface decontaminating agents (e.g., triclosan, pine oil, alkyl dimethyl benzyl ammonium chloride, etc.) and binders or bulking agents. All claims of the 6,448,006 patent require a surface decontaminating agent, disinfectant, or binder or bulking agent to induce a Mar phenotype.

In contrast, the claims as presently pending pertain to methods of screening for compounds which reduce ***antibiotic*** resistance in ***microbes comprising at least two of the following traits: i) at least one chromosomal mutation in a gene encoding a antibiotic target that renders the microbe resistant to one or more antibiotics; ii) a second mutation (to the same gene or a different gene than in (i)) that further increases antibiotic resistance, and iii) increased expression of at least one efflux pump***. The claims further pertain to methods of treating infections caused by such microbes.

Thus, the compounds, microbes, and responses screened for in the 6,448,006 patent are different from those of the presently pending claims. Accordingly, the pending claims are not obvious in light of the claims of the 6,448,006 patent.

Applicants therefore respectfully request reconsideration and withdrawal of the rejection of claims 1-24 under the judicially created doctrine of obviousness-type double patenting as it might be applied to new claims 25-51.

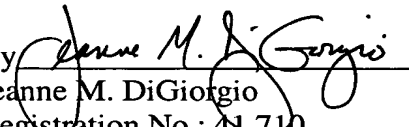
**CONCLUSION**

If a telephone conversation with Applicants' Attorney would expedite prosecution of the above-identified application, the Examiner is urged to call the undersigned at (617) 227-7400. Applicant believes no additional fees are due with this response. However, if additional fees are due, please charge our Deposit Account No. 12-0080, under Order No. PKZ-035CPA2CN2 from which the undersigned is authorized to draw.

Dated: December 1, 2004

Respectfully submitted,

By

  
Jeanne M. DiGiorgio

Registration No.: 41,710

for

Megan E. Williams

Registration No.: 43,270

LAHIVE & COCKFIELD, LLP

28 State Street

Boston, Massachusetts 02109

(617) 227-7400

(617) 742-4214 (Fax)

Attorney/Agent For Applicant